FACT SHEET FOR NPDES PERMIT WA-003135-6

FACILITY NAME: Chemco, Inc.

This fact sheet is a companion document to the draft National Pollutant Discharge Elimination System (NPDES) Permit No. WA-003135-6 for Chemco, Inc., and a reference to the attached fact sheet for the Model Wood Preserving NPDES Permit. The Department of Ecology (the Department) is issuing this permit which will allow discharge of stormwater to Terrel Creek.

This site specific fact sheet and the referenced fact sheet explain the nature of the discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical basis for those decisions.

GENERAL INFORMATION	
Applicant	Chemco, Inc. P.O. Box 975 Ferndale, WA 98248
Facility Location	4191 Grandview Road Ferndale, WA 98248 Whatcom County Nooksack WQMA
Contact	Mr. John Gibb President (360) 366-3500
Type of Industry	Pressure Wood Treating
Receiving Water	Stormwater Discharge to Terrel Creek Tributary to Birch Bay
Discharge Location	Latitude: 48° 53' 48" N Longitude: 122° 42' 76" W
Water Body I.D. No.	WA-01-001

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INTRODUCTION

The Federal Clean Water Act (FCWA, 1972, and later modifications, 1977, 1981, and 1987) established water quality goals for the navigable (surface) waters of the United States. One of the mechanisms for achieving the goals of the Clean Water Act is the National Pollutant Discharge Elimination System of permits (NPDES permits), which is administered by the Environmental Protection Agency (EPA). The EPA has delegated responsibility to administer the NPDES permit program to the State of Washington on the basis of Chapter 90.48 RCW which defines the Department of Ecology's authority and obligations in administering the wastewater discharge permit program.

The regulations adopted by the State include procedures for issuing permits (Chapter 173-220 WAC), water quality criteria for surface and ground waters (Chapters 173-201A and 200 WAC), and sediment management standards (Chapter 173-204 WAC). These regulations require that a permit be issued before discharge of wastewater to waters of the state is allowed. The regulations also establish the basis for effluent limitations and other requirements which are to be included in the permit. One of the requirements (WAC 173-220-060) for issuing a permit under the NPDES permit program is the preparation of a draft permit and an accompanying fact sheet. Public notice of the availability of the draft permit is required at least thirty (30) days before the permit is issued (WAC 173-220-050). The fact sheet and draft permit are available for review (see Appendix A--Public Involvement of the fact sheet for more detail on the public notice procedures).

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in this review have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. Comments and the resultant changes to the permit will be summarized in Appendix C--Response to Comments.

BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

HISTORY

Chemco, Inc, is a pressure wood preserving facility located in Ferndale, Washington, since 1982. The facility operates a fire retardant treatment process using organic based preservative (Melamine), and dimensioned lumber and plywood treatment using inorganic based preservatives [chromated, copper arsenate (CCA)]. The CCA treatment was added to the facility in 1988. However, since the summer of 1997, the CCA operation has been purchased and overseen by All Weather Wood Company. All Weather Wood Company ceased operation of the CCA treating facility in May 2000 and moved all equipment off-site. All Weather Wood Company leases one acre of site for storage of CCA-treated wood. Chemco continues to operate the fire retardant treatment process using Melamine.

After cessation of the CCA operation in 2000, Chemco requested cancellation of their NPDES permit based on the reason that the facility engages in the fire retardant treatment process using only nontoxic organic-based preservatives which generate no wastewater. However, due to the reasons that the facility continues to store treated CCA products on-site, and that the storm water runoff from the facility continues to contain concentrations of copper and chromium that exceed the water quality standards, the Department denied Chemco's request.

INDUSTRIAL PROCESS

Fire Retardant Treatment:

The fire retardant process is described in the attached model fact sheet. Melamine, the retardant polymer used, is made with an organic-based compound: a nitrogen and phosphorous compound known to be nontoxic and water soluble. The drips collected from the bundles after removal from the retort treatment are filtered, and recycled back to the tank farm for solution makeup.

The filtered solids were tested for pH using Test Method 9045, "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW846). The test indicated a pH value of 1.8 s. u., which is lower than the dangerous waste criteria. Therefore, the solids were designated as WSC2 dangerous waste which requires neutralization (above pH of 2 s.u.) prior to landfill disposal. The facility is currently working with the Department's Toxics Reduction Unit to resolve the solid waste issue and to assess the existing liquid waste accumulation method for reuse, to comply with the hazardous waste closed loop definition.

The water sealed pump used in the retort has been modified to recover the pump's contact cooling water and the boiler blow-down into a storage tank for recycling back to the treatment process. The pump's cooling water is therefore no longer discharged to the ponds. The entire fire retardant process area was modified into an enclosed building in 1993. A roofing project for the treated wood storage area, the replacement of the drip pad and the drying area were completed in early 1995.

PRODUCT STORAGE AREA

Most of the storage area on-site is paved. The treated shingle/shake products stored outside the building are occasionally wrapped with plastic per shipping unit. Some of the treated products are stored under cover and some are not, depending on the backlog and shipment delay. The plastic cover is removed when the shingles/shakes are ready to be loaded onto the truck for shipment. The majority of treated lumber is capped and placed in the storage yard.

DISCHARGE OUTFALL AND TREATMENT

The facility previously had two detention ponds and three outfalls. In the spring of 1997, the facility eliminated Outfalls 002 and 003. Pond 2 has been reconstructed to route the water to Pond 1 to augment detention time. The size of Pond 1 has been reduced 10 to 20% from its original size. Stormwater runoff from both the treated and untreated storage areas is collected by Pond 2 which gradually drains to Pond 1 prior to discharge through Outfall 001. Both ponds are currently partially covered with vegetation. The discharge from Outfall 001 travels west of the facility and combines with the runoff from the adjacent railroad which drains out to Terrel Creek. An oil/water separator was installed north of Pond 1 to intercept the stormwater runoff from the high truck traffic area.

PERMIT STATUS

The previous permit for this facility was issued on June 30, 1999. The previous permit placed effluent limitations on oil & grease, total suspended solids, arsenic, chromium, copper, and pH.

An application for permit renewal was submitted to the Department on February 17, 2004, and accepted by the Department on March 1, 2004.

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

During the history of the previous permit, the Permittee had the following violations as shown on the submitted Discharge Monitoring Reports:

Parameter	Dates (month/year)
Flow	9/00, 08/02
Chromium	10/00, 11/00, 12/00, 03/01, 09/01, 10/01, 02/02, 03/02, 10/03, 11/03
Copper	03/01, 10/01, 01/02, 12/02
pH	09/99 through 03/00, 11/00

The Department issued Notice of Violation (NOV) No. DE 00WQNR-1422 to the facility on August 25, 2000, for violations which occurred between March and December 1999. The facility submitted a response to the NOV on September 13, 2000, stating the steps which were taken to prevent copper, chromium, and arsenic from continuing to exceed the effluent limits. The Department found the response to be acceptable and issued a No Further Action Order on October 27, 2000.

The Department issued NOV No. DE 02WQNR-3679 to the facility on April 5, 2002, for the violations which occurred between January 2000 and January 2002. The facility responded to the NOV on April 28, 2002. However, the Department found the corrective actions taken to correct the violations by the facility, as summarized in the response, to be insufficient. Thus, the Department issued a Notice of Penalty to the facility on May 31, 2002, for those violations.

After that point, the facility requested technical assistance from the Department to resolve the metals violations. In March 2003, the Department's Technical Resources for Engineering Efficiency (TREE) team worked with Chemco to identify ways to increase their compliance with the permit. During the course of work with TREE, the on-going copper and chromium violations in the discharge continued. Thus, the Department issued a warning letter on March 2004 to address violations which occurred in the latter 2002 and 2003.

Based on the sampling results, the TREE team developed best management practices (BMPs) to assist the facility in reduction of stormwater effluent contamination. These recommendations are listed in the Waste Reduction Assessment Report that TREE developed for the facility in January 2004. No copper and chromium exceedance has been reported for the month of January and February 2004.

WASTEWATER CHARACTERIZATION

The proposed wastewater discharge for Outfall 001 is characterized for the regulated parameters as follow:

Table 1: Wastewater Characterization for Outfall 001

Parameter	Concentration Reported on the Application	Range of Concentration Based on the Last Five Years Submitted DMRs
Total Suspended Solids (TSS)	36 mg/L	1 to 36 mg/L
Oil & Grease	8 mg/L	2 to 8 mg/L
Arsenic	20 µg/L	1 to 94 µg/L
Chromium	24 µg/L	5 to 68 µg/L
Copper	23 µg/L	5 to 43 µg/L
pH	Between 4 and 8.2 s.u.	

PROPOSED PERMIT LIMITATIONS

Federal and State regulations require that effluent limitations set forth in an NPDES permit must be either technology- or water quality-based. Technology-based limitations are based upon the treatment methods available to treat specific pollutants. Technology-based limitations are set by regulation or developed on a case-by-case basis (40 CFR 125.3, and Chapter 173-220 WAC). Water quality-based limitations are based upon compliance with the Surface Water Quality Standards (Chapter 173-201A WAC), Ground Water Standards (Chapter 173-200 WAC), Sediment Quality Standards (Chapter 173-204 WAC) or the National Toxics Rule (Federal Register, Volume 57, No. 246, Tuesday, December 22, 1992). The more stringent of these two limits must be chosen for each of the parameters of concern. Each of these types of limits is described in more detail below.

The limits in this permit are based in part on information received in the application. The effluent constituents in the application were evaluated on a technology- and water quality-basis. The limits necessary to meet the rules and regulations of the state of Washington were determined and included in this permit. Ecology does not develop effluent limits for all pollutants that may be reported on the application as present in the effluent. Some pollutants are not treatable at the concentrations reported, are not controllable at the source, are not listed in regulation, and do not have a reasonable potential to cause a water quality violation. If significant changes occur in any constituent, as described in 40 CFR 122.42(a), the Permittee is required to notify the Department of Ecology.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

Technology-based limitations are set by regulation in the federal effluent guidelines or on a case-by-case basis using best professional judgement (BPJ) when no effluent guidelines exists for an industrial category. Technology-based limits represent the best treatment a facility can achieve consistent with the economic means of the industry as a whole (in the case of effluent guidelines) or of the specific facility being permitted (in the case of BPJ). Technology-based effluent limits are process control parameters or numbers which indicate that a process, which in this case is wastewater treatment, is not functioning properly.

The technology-based limits proposed in this permit are the same as those placed in the previous permit for oil & grease and TSS. More discussion is provided in the attached model fact sheet.

SURFACE WATER QUALITY-BASED EFFLUENT LIMITATIONS

In order to protect existing water quality and preserve the designated beneficial uses of Washington's surface waters, WAC 173-201A-060 states that waste discharge permits shall be conditioned such that the discharge will meet established surface water quality standards. The Washington State Surface Water Quality Standards (Chapter 173-201A WAC) is a state regulation designed to protect the beneficial uses of the surface waters of the state. Surface water quality-based effluent limitations may be based on an individual waste load allocation (WLA) or on a WLA developed during a basin wide total maximum daily loading study (TMDL).

NUMERICAL CRITERIA FOR THE PROTECTION OF AQUATIC LIFE

"Numerical" water quality criteria are numerical values set forth in the State of Washington's Water Quality Standards for Surface Waters (Chapter 173-201A WAC). They specify the levels of pollutants allowed in a receiving water while remaining protective of aquatic life. Numerical criteria set forth in the water quality standards are used along with chemical and physical data for the wastewater and receiving water to derive the effluent limits in the discharge permit. When surface water quality-based limits are more stringent or potentially more stringent than technology-based limitations, they must be used in a permit.

NUMERICAL CRITERIA FOR THE PROTECTION OF HUMAN HEALTH

The U.S. EPA has promulgated 91 numeric water quality criteria for the protection of human health that are applicable to Washington State (EPA 1992). These criteria are designed to protect humans from cancer and other disease and are primarily applicable to fish and shellfish consumption and drinking water from surface waters.

NARRATIVE CRITERIA

In addition to numerical criteria, "narrative" water quality criteria (WAC 173-201A-030) limit toxic, radioactive, or deleterious material concentrations below those which have the potential to adversely affect characteristic water uses, cause acute or chronic toxicity to biota, impair aesthetic values, or adversely affect human health. Narrative criteria protect the specific beneficial uses of all fresh (WAC 173-201A-130) and marine (WAC 173-201A-140) waters in the state of Washington.

ANTIDEGRADATION

The State of Washington's Antidegradation Policy requires that discharges into a receiving water shall not further degrade the existing water quality of the water body. In cases where the natural conditions of a receiving water are of lower quality than the criteria assigned, the natural conditions shall constitute the water quality criteria. Similarly, when the natural conditions of a receiving water are of higher quality than the criteria assigned, the natural conditions shall constitute the water quality criteria. More information on the State Antidegradation Policy can be obtained by referring to WAC 173-201A-070.

The Department has reviewed existing records and is unable to determine if ambient water quality is either higher or lower than the designated classification criteria given in Chapter 173-201A WAC; therefore, the Department will use the designated classification criteria for this water body in the proposed permit. The discharges authorized by this proposed permit should not cause a loss of beneficial uses.

CRITICAL CONDITIONS

Surface water quality-based limits are derived for the water body's critical condition, which represents the receiving water and waste discharge condition with the highest potential for adverse impact on the aquatic biota, human health, and existing or characteristic water body uses.

MIXING ZONES

The water quality standards allow the Department of Ecology to authorize mixing zones around a point of discharge in establishing surface water quality-based effluent limits. Both "acute" and "chronic" mixing zones may be authorized for pollutants that can have a toxic effect on the aquatic environment near the point of discharge. The concentration of pollutants at the boundary of these mixing zones may not exceed the numerical criteria for that type of zone. Mixing zones can only be authorized for discharges that are receiving all known, available, and reasonable methods of prevention, control and treatment (AKART) and in accordance with other mixing zone requirements of WAC 173-201A-100.

Due to the nature of Chemco's discharge situation (discharge to an open ditch which ultimately discharges into Terrel Creek), there are no appropriate mixing models available for use to perform a traditional mixing study for the facility. However, if Chemco can demonstrate that BMPs consistent with AKART have been implemented, a mixing zone may be granted to Chemco based on the drainage area of the facility taking into account the drainage area surrounding the facility that contributes to the same ditch which discharges to Terrel Creek. The condition of the receiving water (Terrel Creek), with respect to compliance with surface water standards, will be a significant factor of that determination.

The National Toxics Rule (EPA, 1992) allows the chronic mixing zone to be used to meet human health criteria.

DESCRIPTION OF THE RECEIVING WATER

The facility discharges to Terrel Creek which is tributary to Birch Bay. Terrel Creek is designated as Class A fresh water and Birch Bay is designated as Class A marine water in the vicinity of the outfall. Other nearby point source outfalls include Point Whitehorn Generating Station. Characteristic uses include the following:

water supply (domestic, industrial, agricultural); stock watering; fish migration; fish and shellfish rearing, spawning and harvesting; wildlife habitat; primary contact recreation; sport fishing; boating and aesthetic enjoyment; commerce and navigation. Water quality of this class shall meet or exceed the requirements for all or substantially all uses.

SURFACE WATER QUALITY CRITERIA

Applicable criteria are defined in Chapter 173-201A WAC for aquatic biota. In addition, U.S. EPA has promulgated human health criteria for toxic pollutants (EPA 1992).

SURFACE WATER QUALITY-BASED LIMITS FOR NUMERIC CRITERIA

The effluent limits proposed in this permit are based upon acute aquatic life water quality criteria for freshwater discharge for total chromium, arsenic, and copper. The acute aquatic life water quality criteria are given in FR Vol. 60, No. 86. The effluent limit for arsenic and pH remain the same as in the previous permit, 360 µg/L maximum daily for between 6.5 and 8.5 standard units for pH. The effluent limits for chromium and copper are 15 µg/L and 17 µg/L, respectively. A hardness of 100 mg/L was used to calculate these freshwater water quality criteria. The Permittee will be required to obtain hardness data in Terrel Creek. The actual hardness data will be used to recalculate the water quality criterion for copper. The water quality criteria for chromium and arsenic are not hardness dependent. Therefore, the effluent limits for these parameters will remain unchanged. More detailed information is provided in the attached model fact sheet.

WHOLE EFFLUENT TOXICITY

The water quality standards for surface waters require that the effluent not cause toxic effects in the receiving waters. Many toxic pollutants cannot be detected by commonly available detection methods. However, toxicity can be measured directly by exposing living organisms to the wastewater in laboratory tests and measuring the response of the organisms. Toxicity tests measure the aggregate toxicity of the whole effluent, and therefore this approach is called whole effluent toxicity (WET) testing. Some WET tests measure acute toxicity and other WET tests measure chronic toxicity.

Acute toxicity tests measure mortality as the significant response to the toxicity of the effluent. Dischargers who monitor their wastewater with acute toxicity tests are providing an indication of the potential lethal effect of the effluent to organisms in the receiving environment.

Chronic toxicity tests measure various sublethal toxic responses such as retarded growth or reduced reproduction. Chronic toxicity tests often involve either a complete life cycle test of an organism with an extremely short life cycle or a partial life cycle test on a critical stage of one of a test organism's life cycles. Organism survival is also measured in some chronic toxicity tests.

Wood treating involves the use of substances with the potential to be toxic to aquatic life if discharged in excessive concentrations. In addition, Chemco's stormwater has consistently exceeded the water quality acute criteria for copper and chromium. Therefore, this permit will contain whole effluent toxicity testing requirements.

The proposed permit requires the Permittee to conduct toxicity testing in order to characterize the acute toxicity of the effluent. Currently, the Department does not have a policy pertaining to the interpretation of chronic WET testing results for stormwater. Thus, a characterization-only of acute WET testing will be required in this permit. The Department reserves the right to impose chronic WET testing if such policy is established, or new information arises in the future.

Two acute toxicity tests were required in the previous permit. The Permittee conducted one acute test using fathead minnows and daphnia in September 2000. The test indicated that no toxicity exists in the effluent. The second toxicity test was required to be conducted the following year for comparison purposes. However, the Permittee requested postponement of the test until they can demonstrate that the effluent complies with the effluent limits (water quality criteria) for copper and chromium. The Department granted the request in January 2001. According to the recent submitted data, the effluent has been in compliance with the copper and chromium effluent limits for the reporting periods of January and February 2004. The Department proposes that if the Permittee can demonstrate compliance with the permit effluent limits through six consecutive sampling events, toxicity testing would no longer be necessary.

If acute toxicity is measured during effluent characterization at levels that, in accordance with WAC 173-205-050(2)(a), have a reasonable potential to cause receiving water toxicity, then the proposed permit will set a limit on the acute or chronic toxicity. The proposed permit will then require the Permittee to conduct WET testing in order to monitor for compliance with an acute toxicity limit. The proposed permit also specifies the procedures the Permittee must follow in order to achieve compliance if the limits are exceeded.

Accredited WET testing laboratories have the proper WET testing protocols, data requirements, and reporting format. Accredited laboratories are knowledgeable about WET testing and capable of calculating an NOEC, LC_{50}, EC_{50}, IC_{25}, etc. All accredited labs have been provided the most recent version of the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*, which is referenced in the permit. Any Permittee interested in receiving a copy of this publication may call the Ecology Publications Distribution Center (360-407-7472) for a copy. The Department recommends that Permittees send a copy of the acute or chronic toxicity sections(s) of their permits to their laboratory of choice.

When the WET tests during effluent characterization indicate that no reasonable potential exists to cause receiving water toxicity, the Permittee will not be given WET limits.

If the Permittee makes process or material changes which, in the Department's opinion, results in an increased potential for effluent toxicity, then the Department may require additional effluent characterization in a regulatory order, by permit modification, or in the permit renewal. Toxicity is assumed to have increased if WET testing conducted for submission with a permit application fails to meet the performance standards in WAC 173-205-020, "whole effluent toxicity performance standard." The Permittee may demonstrate to the Department that changes have not increased effluent toxicity by performing additional WET testing after the time the process or material changes have been made.

HUMAN HEALTH

Washington's water quality standards now include 91 numeric health-based criteria that must be considered in NPDES permits. These criteria were promulgated for the state by the U.S. EPA in its National Toxics Rule (Federal Register, Volume 57, No. 246, Tuesday, December 22, 1992). Of the 91 numeric human health-based criteria, only arsenic has any relevancy to Chemco's discharge. The human health-based criterion for arsenic is 0.018 µg/L based on consumption of water and fish for fresh water criteria. The arsenic human health criterion is based on a 70-year lifetime of daily exposures consisting of 2 liters/day ingestion rate for drinking water, and 6.5 gm/day ingestion rate for fish or shellfish, and a one-in-one-million excess cancer risk.

Currently, the Department has not established a policy on the application of this criteria to stormwater discharges. Therefore, no human health criteria for arsenic is set in this permit at this time. However, best management practices should be continued, and/or improved, to reduce arsenic concentrations in the discharge.

GROUND WATER QUALITY LIMITATIONS

The Department has promulgated ground water quality standards (Chapter 173-200 WAC) to protect beneficial uses of ground water. Permits issued by the Department shall be conditioned in such a manner so as not to allow violations of those standards (WAC 173-200-100).

Stormwater from the undeveloped grassy area infiltrates to ground. This stormwater is not impacted by the industrial activity on-site and is not expected to be contaminated. Therefore, no limitations are required based on potential effects to ground water.

COMPARISON OF EFFLUENT LIMITS WITH THE EXISTING PERMIT ISSUED on June 30, 1999

Parameters	Previous Effluent Limits	Proposed Effluent Limits
Oil & Grease	10 mg/L	10 mg/L
TSS	50 mg/L	50 mg/L
Arsenic	360 µg/L	360 µg/L
Chromium	15 µg/L	15 µg/L
Copper	17 µg/L	17 µg/L
pH	Between 6.5 and 8.5 s.u.	Between 6.5 and 8.5 s.u.

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are required (WAC 173-220-210 and 40 CFR 122.41) to verify that the treatment process is functioning correctly and the effluent limitations are being achieved.

The monitoring schedule is detailed in the proposed permit under Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

LAB ACCREDITATION

With the exception of certain parameters the permit requires all monitoring data to be prepared by a laboratory registered or accredited under the provisions of Chapter 173-50 WAC, *Accreditation of Environmental Laboratories.*

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The conditions of S3. are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 273-220-210).

SPILL PLAN

The Department has determined that the Permittee stores a quantity of chemicals that have the potential to cause water pollution if accidentally released. The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080.

The Permittee has developed a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs. The proposed permit requires the Permittee to update this plan and submit it to the Department.

SOLID WASTE PLAN

The Department has determined that the Permittee has a potential to cause pollution of the waters of the state from leachate of solid waste.

This proposed permit requires, under the authority of RCW 90.48.080, that the Permittee update the solid waste plan designed to prevent solid waste from causing pollution of the waters of the state. The plan must be submitted to the local permitting agency for approval, if necessary, and to the Department.

BEST MANAGEMENT PRACTICES

The Department proposes a list of best management practices, including source control to be placed in Special Condition S8 of the permit, to assist the improvement of Chemco's stormwater water quality regarding metals, pH, and TSS.

GENERAL CONDITIONS

General Conditions are based directly on state and federal law and regulations and have been standardized for all individual industrial NPDES permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending, or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes, or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control its production in order to maintain compliance with its permit. Condition G10 prohibits the reintroduction of removed substances back into the effluent. Condition G11 states that the Department will modify or revoke and reissue the permit to conform to more stringent toxic effluent standards or prohibitions. Condition G12 incorporates by reference all other requirements of 40 CFR 122.41 and 122.42. Condition G13 notifies the Permittee that additional monitoring requirements may be established by the Department. Condition G14 requires the payment of permit fees. Condition G15 describes the penalties for violating permit conditions.

PERMIT ISSUANCE PROCEDURES

PERMIT MODIFICATIONS

The Department may modify this permit to impose numerical limitations, if necessary, to meet water quality standards for surface waters, sediment quality standards, or water quality standards for ground waters, based on new information obtained from sources such as inspections, effluent monitoring, outfall studies, and effluent mixing studies.

The Department may also modify this permit as a result of new or amended state or federal regulations.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics, protect human health, aquatic life, and the beneficial uses of waters of the state of Washington. The Department proposes that this proposed permit be issued for five (5) years.

REFERENCES FOR TEXT AND APPENDICES

Chemco

1998. NPDES Permit Application, February 17, 2004.

1999-2004. Monitoring data.

Environmental Protection Agency (EPA)

1992. National Toxics Rule. Federal Register, V. 57, No. 246, Tuesday, December 22, 1992.

1991. Technical Support Document for Water Quality-based Toxics Control. EPA/505/2-90-001.

Washington State Department of Ecology.

1994. Permit Writer's Manual. Publication Number 92-109.

1993. Fact Sheet For The Model Wood Preserving NPDES Permit. January 15, 1993.

1993. Model NPDES Permit For Facilities Using Inorganic Treating Chemicals. January 15, 1993.

APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page one of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public Notice of Application (PNOA) was published on March 3 and 10, 2004, in the *Bellingham Herald* to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

The Department will publish a Public Notice of Draft (PNOD) on XXXX in the *Bellingham Herald* to inform the public that a draft permit and fact sheet are available for review. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments should be mailed to:

Water Quality Permit Coordinator
WA State Department of Ecology
Northwest Regional Office
3190 – 160th Avenue SE
Bellevue, WA 98008-5452

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30) day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-220-090). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing (WAC 173-220-100).

The Department will consider all comments received within thirty (30) days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, (425) 649-7201, or by writing to the address listed above.

This permit and fact sheet were written by Jeanne Tran, P.E.

APPENDIX B—GLOSSARY

Acute Toxicity--The lethal effect of a compound on an organism that occurs in a short period of time, usually 48 to 96 hours.

AKART--An acronym for "all known, available, and reasonable methods of treatment."

Ambient Water Quality--The existing environmental condition of the water in a receiving water body.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

Chronic Toxicity--The effect of a compound on an organism over a relatively long time, often 1/10 of an organism's lifespan or more. Chronic toxicity can measure survival, reproduction or growth rates, or other parameters to measure the toxic effects of a compound or combination of compounds.

Clean Water Act (CWA)--The Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, 97-117; USC 1251 et seq.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Construction Activity--Clearing, grading, excavation, and any other activity which disturbs the surface of the land. Such activities may include road building; construction of residential houses, office buildings, or industrial buildings; and demolition activity.

Critical Condition--The time during which the combination of receiving water and waste discharge conditions have the highest potential for causing toxicity in the receiving water environment. This situation usually occurs when the flow within a water body is low, thus, its ability to dilute effluent is reduced.

Dilution Factor--A measure of the amount of mixing of effluent and receiving water that occurs at the boundary of the mixing zone. Expressed as the inverse of the percent effluent fraction, e.g., a dilution factor of 10 means the effluent comprises 10% by volume and the receiving water 90%.

Engineering Report--A document which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample--A single sample or measurement taken at a specific time or over as short a period of time as is feasible.

Industrial Wastewater--Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Major Facility--A facility discharging to surface water with an EPA rating score of > 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Maximum Daily Discharge Limitation--The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Minor Facility--A facility discharging to surface water with an EPA rating score of < 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Mixing Zone--An area that surrounds an effluent discharge within which water quality criteria may be exceeded. The area of the authorized mixing zone is specified in a facility's permit and follows procedures outlined in state regulations (Chapter 173-201A WAC).

National Pollutant Discharge Elimination System (NPDES)--The NPDES (Section 402 of the Clean Water Act) is the federal wastewater permitting system for discharges to navigable waters of the United States. Many states, including the state of Washington, have been delegated the authority to issue these permits. NPDES permits issued by Washington State permit writers are joint NPDES/State permits issued under both state and federal laws.

pH--The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Responsible Corporate Officer--A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

Technology-based Effluent Limit--A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

State Waters--Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater--That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Upset--An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventative maintenance, or careless or improper operation.

Water Quality-based Effluent Limit--A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

APPENDIX C—SITE MAP

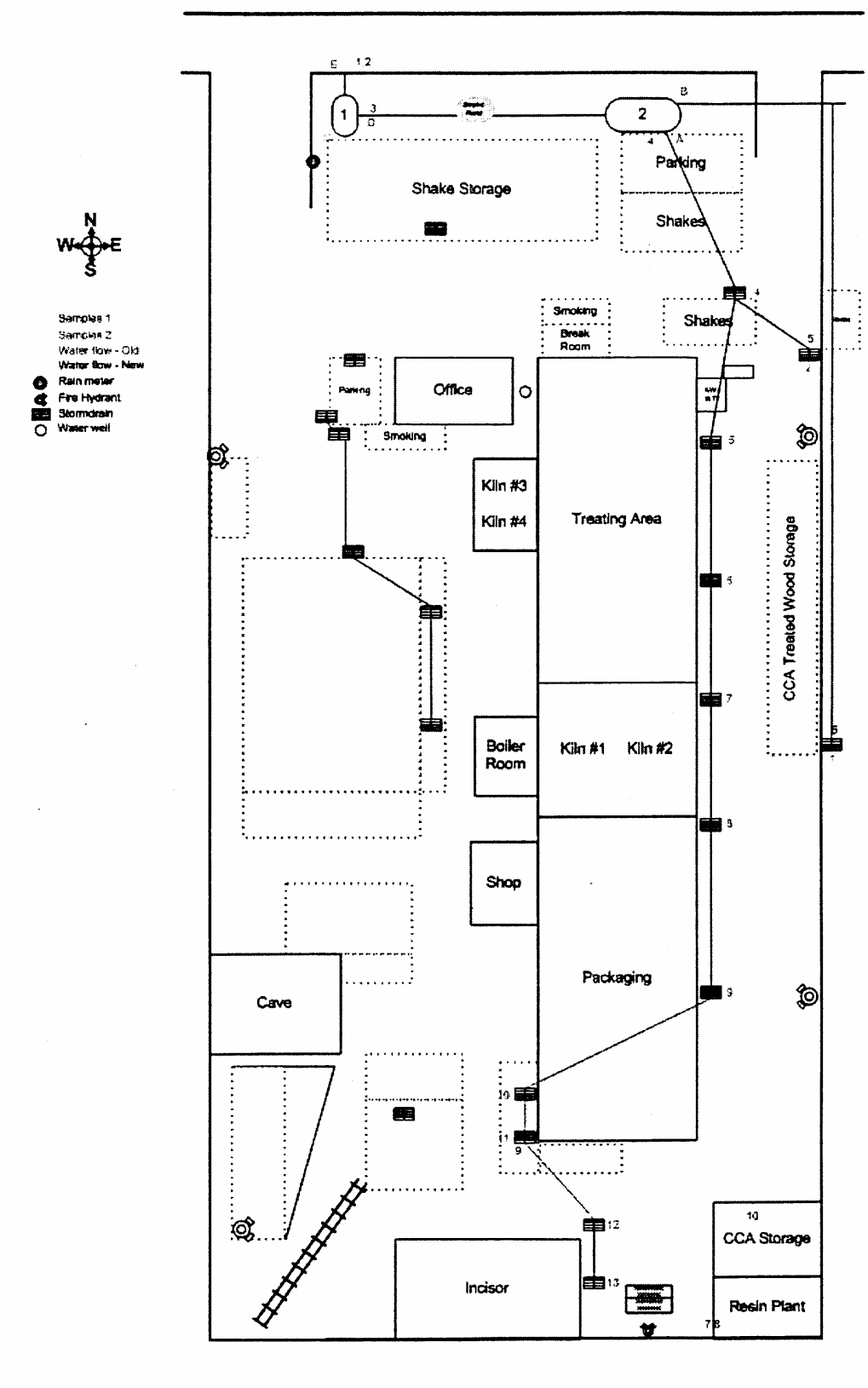

Figure 1.

APPENDIX D—RESPONSE TO COMMENTS